

### REMARKS/ARGUMENTS

The Examiner is thanked for the detailed comments. While the Applicants have carefully reviewed the Examiner's rejections, they respectfully request the Examiner's further consideration of the reasons set out below.

#### **RE: Claim Rejections – 35 U.S.C. § 102 (Anticipation)**

Claims 1, 3-6, and 12-13 were rejected under 35 U.S.C §102(e) as being anticipated by Clark et al. US Publication no. 2004/0208516.

With regard to claims 1 and 12, Clark does describe a system in which “terminals **220a** and **220b** can be interconnected via a system of n spans” and does disclose measuring the SNR “over a subset of spans”.

Although it is arguable if Clark shows the steps (a) and (b) of claim 1 of the present invention, it is the Applicants' strong opinion that Clark does not disclose the steps of or means for:

- (c) gradually increasing optical power ... until the optical signal is detected
- (d) verifying if the detected optical signal is being detected at a correct location
- (e) selecting a next section of the optical link, and
- (f) repeating steps (c) to (e) until all sections in the optical link have been selected.

Thus Clark does not have all the features of the present invention.

In particular, the examiner cites page 3, paragraph 0033 of Clark as having disclosed the step of “gradually increasing optical power ... until the optical signal is detected”. Clark discloses in paragraph 0033: determining “whether the measured SNR( $\lambda$ ) is approximately equal to a constant value across wavelengths”, determining “a pre-emphasis value”, and providing “a pre-emphasis”. There is no mention of “gradually increasing optical power ... until the optical signal is detected”. Moreover, nowhere in Clark is described the step of “gradually increasing optical power ... until the optical signal is detected”.

The examiner also cites page 3, paragraph 0033 of Clark as having disclosed the step of “verifying if the detected optical signal is being detected at a correct location according to a

network specification and if the power of the detected optical signal is at the expected level according to the network specification”. This is not disclosed in page 3, paragraph 0033 of Clark or anywhere else in Clark et al. US publication no. 2004/0208516.

The present invention discloses determining whether measured signals are detected in the correct locations and have the correct power levels, whereas Clark discloses determining whether measured signals have an SNR that is constant across wavelengths.

The examiner also quotes “selecting the next sub-set of span” as anticipating the step (e) of the present the invention of “selecting a next section of the optical link adjacent to the previously selected section and further away from the transmitter”. However, the cited text could not be found in Clark et al. US publication no. 2004/0208516.

Finally, the examiner again cites page 3, paragraph 0033 of Clark as having disclosed the step of “repeating the steps (c) to (e) until all sections in the optical link have been selected. Clark discloses in paragraph 0033: determining “whether the measured SNR( $\lambda$ ) is approximately equal to a constant value across wavelengths”, determining “a pre-emphasis value”, and providing “a pre-emphasis”. There is no mention in page 3, paragraph 0033 or anywhere else in Clark of repeating steps (c) to (e) of claim 1.

The present invention discloses selecting and applying steps (c) and (d) to each section along a link until all sections have been selected. Not only are steps (c) and (d) are not disclosed in Clark, but also Clark does not explicitly disclose repeating these steps for each section of a link.

Thus, Clark does not include each and every feature of claim 1 of the present invention, and therefore cannot be anticipated by Clark.

Regarding claim 3, the examiner cites page 3, paragraph 0032-0033 of Clark as having disclosed the step of “increasing the optical power continuously”. In particular, Clark discloses that the “power control unit 360 may set power levels of each laser diode ... by appropriately biasing each laser diode, or by controlling the adaptive attenuators”. However, Clark does not disclose doing so “continuously”.

Regarding claims 6 and 13, the examiner cites page 3, paragraph 0033 of Clark as having

disclosed "increasing optical power in steps provided by sets of precalculated link budgets". It is not clear which phrases in paragraph 0033 the examiner is referring to as there is no mentioning of this feature of claim 1 in para 0033 of Clark. The examiner is requested to clarify the above with further details.

**RE: Claim Rejections – 35 U.S.C. § 103 (Obviousness)**

Claims 2 and 7-11 have been rejected under 35 U.S.C §103(a) as being unpatentable over Clark et al. US Publication no. 2004/0208516.

As the examiner's rejection of claims 2 and 7-11 have been made under assumption that claim 1 is anticipated by Clark, the above noted obviousness rejection of claims 2 and 7-11 is not applicable as claim 1 is not anticipated by Clark.

Thus, claims 2 and 7-11 are not obvious in view of Clark, and the examiner's rejections under 35 USC 103(a) have been traversed.

**Conclusion**

No new matter has been added.

As discussed above, the present invention is not anticipated by Clark and not obvious in view of Clark. Therefore the examiner's rejections under 35 USC 102(e) and 103(a) have been overcome.

In view of the foregoing, a favorable consideration of the application is courteously requested.

**An advisory action for this application is requested at examiner's earliest convenience and preferably no later than Dec 06, 2007 to avoid extension of time for further actions with regard to this application.**

Respectfully submitted,  
McCloskey, et al

A handwritten signature in black ink, appearing to read "Victoria Donnelly", with a stylized flourish at the end.

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